

MEMORANDUM

Superfund Records Center
SITE: Wells 9 & 11
BREAK: 3-2
OTHER: 549619

TO: J. Lawson

MEMO NO.: 102-APP-317

FROM: A. Paradice

FILE: 0005-407

SUBJECT: Unifirst, Woburn

DATE: 10/15/87

The results for the analysis of various Water samples received from the Woburn, MA site, on 9/4/87 are attached.

The cost for these analyses is \$ 800.00.

It should be noted that sample Field ID UC-11 (Lab #47351R) was analyzed outside of accepted holding times. It is our opinion however, that the data are accurate and acceptable. The sample was initially screened by GC/FID with all results less than the detectable limit of 20 ug/L. The sample was also analyzed GC/MS within holding time with similar results but, the surrogate recoveries were above acceptable limits.

Please feel free to contact me if you have any questions or comments.

A. Paradice

APP/eps

cc:

memo only

P. Pelletier

M. Sparlin

T. Trainor

Report Gen.

+ disposition letter

M. Lynn

+ report

Chemistry File



SDMS DocID 549619

ERT
33 Industrial Way
Wilmington, MA 01887
(617) 657-4290

From: LABORATORY MANAGER

Date of
Issuance: 10/15/87

Subject: SAMPLE RETENTION TERMS

Client: Unifirst, Woburn, MA.
(0005-407)

Date Sample
Received: 9/4/87

Number of Samples
Received/Matrix: 4 Water

It is the policy of ERT to dispose of unanalyzed portions of samples thirty (30) days following submittal of the pertinent final analytical results report. This letter serves as notification that the above samples will be due for disposal. Sample extracts for organic analyses will be archived for one (1) year. Separate notification will be sent to you prior to disposal of sample extracts.

- A. ERT will return to you all unused samples at your expense (Federal Express), or
- B. ERT will maintain custody of the samples at a cost of fifteen dollars (\$15.00) per sample per quarter for refrigerated storage, and three dollars (\$3.00) per sample per quarter for ambient storage. You will be billed in advance each quarter based upon the number of samples in storage at the beginning of the quarter. The minimum storage fee per project will be fifty dollars (\$50.00) per quarter to cover administrative costs.

YOU MUST RETURN THIS LETTER TO THE LABORATORY MANAGER WITH PROPER AUTHORIZATION (i.e., Purchase Order Number, Federal Express Number, etc), SAMPLE OPTION, SIGNATURE AND DATE WITHIN THIRTY (30) DAYS OF ISSUANCE OR THE SAMPLES INDICATED ABOVE WILL BE DISPOSED.

OPTION: _____

AUTHORIZATION NO.: _____ (Federal Express)

_____ (Purchase Order)

SIGNATURE: _____

DATE: _____

VOLATILE ORGANIC COMPOUND ANALYSIS IN WATER

Summary of Analytical Results

Method Blank Results

Quality Control Check Sample Results

ERT ANALYTICAL LABORATORY
SUMMARY OF ANALYTICAL RESULTS
VOLATILE ORGANIC COMPOUNDS IN WATER

ERT NO.: 47351R
FLD ID: UC-11 RERUN
SAMPLING SITE: WOBURN, MA

CLIENT: UNIFIRST
DATE SAMPLED: 09/04/87
DATE ANALYZED: 09/29/87

PARAMETER	RESULT UG/L	PARAMETER	RESULT UG/L
CHLOROMETHANE	BDL	TRANS-1,3-DICHLOROPROPENE	BDL
BROMOMETHANE	BDL	TRICHLOROETHENE	BDL
VINYL CHLORIDE	BDL	DIBROMOCHLOROMETHANE	BDL
CHLOROETHANE	BDL	1,1,2-TRICHLOROETHANE	BDL
METHYLENE CHLORIDE	BDL	BENZENE	BDL
ACETONE	BDL	CIS-1,3-DICHLOROPROPENE	BDL
CARBON DISULFIDE	BDL	2-CHLOROETHYL VINYL ETHER	BDL
1,1-DICHLOROETHENE	BDL	BROMOFORM	BDL
1,1-DICHLOROETHANE	BDL	2-HEXANONE	BDL
TRANS-1,2-DICHLOROETHENE	BDL	4-METHYL-2-PENTANONE	BDL
CHLOROFORM	BDL	TETRACHLOROETHENE	BDL
1,2-DICHLOROETHANE	BDL	1,1,2,2-TETRACHLOROETHANE	BDL
2-BUTANONE	BDL	TOLUENE	BDL
1,1,1-TRICHLOROETHANE	BDL	CHLOROBENZENE	BDL
CARBON TETRACHLORIDE	BDL	ETHYL BENZENE	BDL
VINYL ACETATE	BDL	STYRENE	BDL
BROMODICHLOROMETHANE	BDL	TOTAL XYLENES	BDL
1,2-DICHLOROPROPANE	BDL		

SURROGATE RECOVERY %

1,2-DICHLOROETHANE, D4	110
BENZENE, D6	106
TOLUENE, D8	110
BROMOFLUOROBENZENE	106

BDL = BELOW DETECTION LIMIT (CONC.<10 UG/L)

REVIEWED by

ANALYST kc 10/2/87
SUPERVISOR [Signature] 10/6/87
QC COORD [Signature] 10/14/87

ERT ANALYTICAL LABORATORY
SUMMARY OF ANALYTICAL RESULTS
VOLATILE ORGANIC COMPOUNDS IN WATER

ERT NO.: 47352
FLD ID: UC-12
SAMPLING SITE: WOBURN, MA

CLIENT: UNIFIRST
DATE SAMPLED: 09/04/87
DATE ANALYZED: 09/11/87

PARAMETER	RESULT UG/L	PARAMETER	RESULT UG/L
CHLOROMETHANE	BDL	TRANS-1,3-DICHLOROPROPENE	BDL
BROMOMETHANE	BDL	TRICHLOROETHENE	BDL
VINYL CHLORIDE	BDL	DIBROMOCHLOROMETHANE	BDL
CHLOROETHANE	BDL	1,1,2-TRICHLOROETHANE	BDL
METHYLENE CHLORIDE	BDL	BENZENE	BDL
ACETONE	BDL	CIS-1,3-DICHLOROPROPENE	BDL
CARBON DISULFIDE	BDL	2-CHLOROETHYL VINYL ETHER	BDL
1,1-DICHLOROETHENE	BDL	BROMOFORM	BDL
1,1-DICHLOROETHANE	BDL	2-HEXANONE	BDL
TRANS-1,2-DICHLOROETHENE	BDL	4-METHYL-2-PENTANONE	BDL
CHLOROFORM	BDL	TETRACHLOROETHENE	BDL
1,2-DICHLOROETHANE	BDL	1,1,2,2-TETRACHLOROETHANE	BDL
2-BUTANONE	BDL	TOLUENE	BDL
1,1,1-TRICHLOROETHANE	BDL	CHLOROBENZENE	BDL
CARBON TETRACHLORIDE	BDL	ETHYL BENZENE	BDL
VINYL ACETATE	BDL	STYRENE	BDL
BROMODICHLOROMETHANE	BDL	TOTAL XYLENES	BDL
1,2-DICHLOROPROPANE	BDL		

SURROGATE RECOVERY %

1,2-DICHLOROETHANE, D4	80
BENZENE, D6	97
TOLUENE, D8	102
BROMOFLUOROBENZENE	102

BDL = BELOW DETECTION LIMIT (CONC. < 10 UG/L)

REVIEWED by

ANALYST dc 10/2/87
SUPERVISOR JP 10/2/87
QC COORD JP 10/2/87

ERT ANALYTICAL LABORATORY
SUMMARY OF ANALYTICAL RESULTS
VOLATILE ORGANIC COMPOUNDS IN WATER

ERT NO.: 47353
FLD ID: FIELD BLANK
SAMPLING SITE: WOBURN, MA

CLIENT: UNIFIRST
DATE SAMPLED: 09/04/87
DATE ANALYZED: 09/11/87

PARAMETER	RESULT UG/L	PARAMETER	RESULT UG/L
CHLOROMETHANE	BDL	TRANS-1,3-DICHLOROPROPENE	BDL
BROMOMETHANE	BDL	TRICHLOROETHENE	BDL
VINYL CHLORIDE	BDL	DIBROMOCHLOROMETHANE	BDL
CHLOROETHANE	BDL	1,1,2-TRICHLOROETHANE	BDL
METHYLENE CHLORIDE	160	BENZENE	BDL
ACETONE	BDL	CIS-1,3-DICHLOROPROPENE	BDL
CARBON DISULFIDE	BDL	2-CHLOROETHYL VINYL ETHER	BDL
1,1-DICHLOROETHENE	BDL	BROMOFORM	BDL
1,1-DICHLOROETHANE	BDL	2-HEXANONE	BDL
TRANS-1,2-DICHLOROETHENE	BDL	4-METHYL-2-PENTANONE	BDL
CHLOROFORM	BDL	TETRACHLOROETHENE	BDL
1,2-DICHLOROETHANE	BDL	1,1,2,2-TETRACHLOROETHANE	BDL
2-BUTANONE	BDL	TOLUENE	BDL
1,1,1-TRICHLOROETHANE	BDL	CHLOROBENZENE	BDL
CARBON TETRACHLORIDE	BDL	ETHYL BENZENE	BDL
VINYL ACETATE	BDL	STYRENE	BDL
BROMODICHLOROMETHANE	BDL	TOTAL XYLENES	BDL
1,2-DICHLOROPROPANE	BDL		

SURROGATE RECOVERY %

1,2-DICHLOROETHANE, D4	82
BENZENE, D6	96
TOLUENE, D8	97
BROMOFLUOROBENZENE	99

BDL = BELOW DETECTION LIMIT (CONC.<10 UG/L)

REVIEWED by

ANALYST KE 10/2/87
SUPERVISOR 427 10/6/87
QC COORD 10/4/87

ERT ANALYTICAL LABORATORY
SUMMARY OF ANALYTICAL RESULTS
VOLATILE ORGANIC COMPOUNDS IN WATER

ERT NO.: 47354
FLD ID: SHIPPING BLANK
SAMPLING SITE: WOBURN, MA

CLIENT: UNIFIRST
DATE SAMPLED: 09/01/87
DATE ANALYZED: 09/11/87

PARAMETER	RESULT UG/L	PARAMETER	RESULT UG/L
CHLOROMETHANE	BDL	TRANS-1,3-DICHLOROPROPENE	BDL
BROMOMETHANE	BDL	TRICHLOROETHENE	BDL
VINYL CHLORIDE	BDL	DIBROMOCHLOROMETHANE	BDL
CHLOROETHANE	BDL	1,1,2-TRICHLOROETHANE	BDL
METHYLENE CHLORIDE	BDL	BENZENE	BDL
ACETONE	BDL	CIS-1,3-DICHLOROPROPENE	BDL
CARBON DISULFIDE	BDL	2-CHLOROETHYL VINYL ETHER	BDL
1,1-DICHLOROETHENE	BDL	BROMOFORM	BDL
1,1-DICHLOROETHANE	BDL	2-HEXANONE	BDL
TRANS-1,2-DICHLOROETHENE	BDL	4-METHYL-2-PENTANONE	BDL
CHLOROFORM	BDL	TETRACHLOROETHENE	BDL
1,2-DICHLOROETHANE	BDL	1,1,2,2-TETRACHLOROETHANE	BDL
2-BUTANONE	BDL	TOLUENE	BDL
1,1,1-TRICHLOROETHANE	BDL	CHLOROBENZENE	BDL
CARBON TETRACHLORIDE	BDL	ETHYL BENZENE	BDL
VINYL ACETATE	BDL	STYRENE	BDL
BROMODICHLOROMETHANE	BDL	TOTAL XYLENES	BDL
1,2-DICHLOROPROPANE	BDL		

SURROGATE RECOVERY %

1,2-DICHLOROETHANE, D4	80
BENZENE, D6	95
TOLUENE, D8	97
BROMOFLUOROBENZENE	97

BDL = BELOW DETECTION LIMIT (CONC. < 10 UG/L)

REVIEWED by

ANALYST dc 10/2/87

SUPERVISOR 41 10/16/87

QC COORD 10/14/87

ERT ANALYTICAL LABORATORY
SUMMARY OF ANALYTICAL RESULTS
VOLATILE ORGANIC COMPOUNDS IN WATER

ERT NO.: 47637
FLD ID: MB870710
SAMPLING SITE: WOBURN, MA

CLIENT: UNIFIRST
DATE SAMPLED: 09/11/87
DATE ANALYZED: 09/11/87

PARAMETER	RESULT UG/L	PARAMETER	RESULT UG/L
CHLOROMETHANE	BDL	TRANS-1,3-DICHLOROPROPENE	BDL
BROMOMETHANE	BDL	TRICHLOROETHENE	BDL
VINYL CHLORIDE	BDL	DIBROMOCHLOROMETHANE	BDL
CHLOROETHANE	BDL	1,1,2-TRICHLOROETHANE	BDL
METHYLENE CHLORIDE	BDL	BENZENE	BDL
ACETONE	100	CIS-1,3-DICHLOROPROPENE	BDL
CARBON DISULFIDE	BDL	2-CHLOROETHYL VINYL ETHER	BDL
1,1-DICHLOROETHENE	BDL	BROMOFORM	BDL
1,1-DICHLOROETHANE	BDL	2-HEXANONE	BDL
TRANS-1,2-DICHLOROETHENE	BDL	4-METHYL-2-PENTANONE	BDL
CHLOROFORM	BDL	TETRACHLOROETHENE	BDL
1,2-DICHLOROETHANE	BDL	1,1,2,2-TETRACHLOROETHANE	BDL
2-BUTANONE	BDL	TOLUENE	BDL
1,1,1-TRICHLOROETHANE	BDL	CHLOROBENZENE	BDL
CARBON TETRACHLORIDE	BDL	ETHYL BENZENE	BDL
VINYL ACETATE	BDL	STYRENE	BDL
BROMODICHLOROMETHANE	BDL	TOTAL XYLENES	BDL
1,2-DICHLOROPROPANE	BDL		

SURROGATE RECOVERY %

1,2-DICHLOROETHANE, D4	81
BENZENE, D6	97
TOLUENE, D8	98
BROMOFLUOROBENZENE	100

BDL = BELOW DETECTION LIMIT (CONC.<10 UG/L)

REVIEWED by

ANALYST jc 10/2/87
SUPERVISOR [Signature] 10/6/87
QC COORD [Signature] 10/13/87

ERT ANALYTICAL LABORATORY
SUMMARY OF ANALYTICAL RESULTS
VOLATILE ORGANIC COMPOUNDS IN WATER

ERT NO.: 48161
FLD ID: MB870819
SAMPLING SITE: WOBURN, MA

CLIENT: UNIFIRST
DATE SAMPLED: 09/29/87
DATE ANALYZED: 09/29/87

PARAMETER	RESULT UG/L	PARAMETER	RESULT UG/L
CHLOROMETHANE	BDL	TRANS-1,3-DICHLOROPROPENE	BDL
BROMOMETHANE	BDL	TRICHLOROETHENE	BDL
VINYL CHLORIDE	BDL	DIBROMOCHLOROMETHANE	BDL
CHLOROETHANE	BDL	1,1,2-TRICHLOROETHANE	BDL
METHYLENE CHLORIDE	BDL	BENZENE	BDL
ACETONE	BDL	CIS-1,3-DICHLOROPROPENE	BDL
CARBON DISULFIDE	BDL	2-CHLOROETHYL VINYL ETHER	BDL
1,1-DICHLOROETHENE	BDL	BROMOFORM	BDL
1,1-DICHLOROETHANE	BDL	2-HEXANONE	BDL
TRANS-1,2-DICHLOROETHENE	BDL	4-METHYL-2-PENTANONE	BDL
CHLOROFORM	BDL	TETRACHLOROETHENE	BDL
1,2-DICHLOROETHANE	BDL	1,1,2,2-TETRACHLOROETHANE	BDL
2-BUTANONE	BDL	TOLUENE	BDL
1,1,1-TRICHLOROETHANE	BDL	CHLOROBENZENE	BDL
CARBON TETRACHLORIDE	BDL	ETHYL BENZENE	BDL
VINYL ACETATE	BDL	STYRENE	BDL
BROMODICHLOROMETHANE	BDL	TOTAL XYLENES	BDL
1,2-DICHLOROPROPANE	BDL		

SURROGATE RECOVERY %

1,2-DICHLOROETHANE, D4	102
BENZENE, D6	108
TOLUENE, D8	110
BROMOFLUOROBENZENE	105

BDL = BELOW DETECTION LIMIT (CONC. < 10 UG/L)

REVIEWED by

ANALYST RC 10/1/87
SUPERVISOR W. P. 10/1/87
QC COORD W. P. 10/1/87

ERT ANALYTICAL LABORATORY
SUMMARY OF ANALYTICAL RESULTS
VOLATILE ORGANIC COMPOUNDS IN WATER

ERT NO.: 47638
FLD ID: LF871048
SAMPLING SITE: WOBURN, MA

CLIENT: UNIFIRST
DATE SAMPLED: 09/11/87
DATE ANALYZED: 09/11/87

PARAMETER	% RECOVERY
VINYL CHLORIDE	110
1,1-DICHLOROETHENE	95
CHLOROFORM	98
1,2-DICHLOROPROPANE	96
TOLUENE	98
ETHYL BENZENE	97

✓ dc 10/2/87
✓ JRP 10/6/87
✓ JRP 10/4/87

ERT ANALYTICAL LABORATORY
SUMMARY OF ANALYTICAL RESULTS
VOLATILE ORGANIC COMPOUNDS IN WATER

ERT NO.: 48166
FLD ID: LF871114
SAMPLING SITE: WOBURN, MA

CLIENT: UNIFIRST
DATE SAMPLED: 09/29/87
DATE ANALYZED: 09/29/87

PARAMETER	% RECOVERY
VINYL CHLORIDE	100
1,1-DICHLOROETHENE	140
CHLOROFORM	130
1,2-DICHLOROPROPANE	93
TOLUENE	100
ETHYL BENZENE	94

✓ 10/6/87
✓ 10/6/87
✓ 10/14/87

CHAIN-OF CUSTODY RECORDS

UNIFIRST

WOBURN, MA.

0005-407

CHAIN OF CUSTODY RECORD

Client/Project Name UniFirst			Project Location Woburn MA			ANALYSES 624 STD TURNAROUND REMARKS						
Project No. D495-004			Field Logbook No.									
Sampler: (Signature) <i>Jerry Hogan</i>			Chain of Custody Tape No.									
Sample No./ Identification	Date	Time	Lab Sample Number	Type of Sample								
UC-11 Drill WATER	7/4/87	8:00A	47351	WATER	✓							3 UOA VIALS
UC-12 Drill WATER	9/4/87	12:00P	47352	↓	↓							↓
FIELD BLANK	9/4/87	12:15P	47353	↓	↓							↓
SHIPPING BLANK	9/1/87	3:44P	47354	↓	↓							↓
Relinquished by: (Signature) <i>Jerry Hogan</i>				Date 9/4/87	Time 13:15	Received by: (Signature)				Date	Time	
Relinquished by: (Signature)				Date	Time	Received by: (Signature)				Date	Time	
Relinquished by: (Signature)				Date	Time	Received for Laboratory: (Signature) <i>Michael J. Ryan</i>				Date 9/4/87	Time 13:15	
Sample Disposal Method:				Disposed of by: (Signature)				Date	Time			
SAMPLE COLLECTOR Environmental Research and Technology, Inc. 696 Virginia Road Concord, MA 01742 617-369-8910				ANALYTICAL LABORATORY				ERT No 7298				



SAMPLE RECEIPT CHECK LIST

Client: • *Unifirst, Woburn* 0005-407COC Record #(s): *7298*

Matrix	Container	ERT #(s)
<i>Water MS001</i>	<i>3 VOA vials</i>	<i>47351-47354 = 4</i>

1. Were samples shipped or hand-delivered?

Notes:

Yes ☒ No ☐

2. Was COC record present upon receipt of samples?

Notes:

Yes ☐ No ☒

3. Was COC tape present/unbroken on outer package?

Notes:

4. Were samples received ambient or chilled?

Notes:

Yes ☐ No ☒

5. Were any samples received broken/leaking (improperly sealed)?

Notes:

Yes ☒ No ☐

6. Were samples properly preserved?

Notes:

Yes ☐ No ☒

7. Were COC types present/unbroken on samples?

Notes:

Yes ☐ No ☒

8. Any discrepancies between sample labels and COC records?

Notes:

Yes ☒ No ☐

9. Were samples received within holding times?

Notes:

Additional Comments:

RS

Samples inspected and logged in by

*Michael J. Hy*Date: *9/4/87*